



# ENCAPSULATION AND POTTING RESINS

ROHS COMPLIANT ■ SOLVENT FREE ■ HALOGEN FREE ■ ADAPTABLE SYSTEMS



**BUILDING TRUST**



# Sika Advanced Resins

## HIGH TECH RESINS

### FOR INNOVATIVE INDUSTRIES

Our resin formulations satisfy the most demanding requirements of potting, encapsulation and casting applications in numerous industries, including electronic devices, automotive and aerospace: resins for capacitors, relays, transformers, sensors, electronic boards, coils, electronic devices, filters.

Our resin systems can withstand the high temperatures associated with lead-free soldering processes. Their purity is combined with excellent mechanical and chemical stability, minimizing contamination and maximizing safety during the handling of sensitive electronic components.



#### AVAILABLE SYSTEMS:

- Epoxy and polyurethane
- Customized processability
- Superior wear resistance
- High purity
- Mechanical strength
- Flame retardant resins
- Thermal conductivity
- Dielectric properties
- Excellent dimensional stability
- Chemical & environmental resistance
- Excellent temperature performance
- Thermal shock resistance
- "Re-entrable/dig-outable" resins

All our resins can be adapted to your requirements. All products are composed of two parts and can be cured at room temperature. Sika Advanced Resins systems are designed to efficiently integrate into your industrial application process.

Product	Rigidity	Color	Applications	UL listing, EN certification	Shore hardness	Viscosity (mPa.s @ 25 °C)	Pot life (min)*	Density (g/cm <sup>3</sup> )	Mix ratio (weight)
<b>EPOXY RESINS</b>									
<b>RESIN (A)</b>	<b>HARDENER (B)</b>								
SikaBiresin® RE 801	flexible		Sensitive electronics that require resistance to thermal shock. PCB components.		62 D	3.500	180	1,47	100:20
SikaBiresin® RE 801	semi-rigid		Multipurpose: Capacitors, relays, coils, bobines, industrial applications requiring an extremely resistant resin. UL 94: V0 / UL 746B: RTI 90 °C.	UL 94: V0 UL 746B: RTI 90 °C	80 D	3.500	55	1,53	100:16
SikaBiresin® RE 891	rigid		Multipurpose: Electric motors, transformers, coils, relays. High temperature resistance +150°C. UL 94: V0 / UL 746B: RTI 90 °C.	UL 94: V0 UL 746B: RTI 90 °C	88 D	3.000	200	1,49	100:12

Product	Rigidity	Color	Applications	UL listing, EN certification	Shore hardness	Viscosity (mPa.s @ 25 °C)	Pot life (min)*	Density (g/cm <sup>3</sup> )	Mix ratio (weight)
<b>POLYURETHANE RESINS</b>									
<b>POLYOL (A)</b>	<b>ISOCYANATE (B)</b>								
SikaBiresin® RE 323			Protection of very brittle electronic components. Sensors. Antennas.		32 A	1.700	12	0,98	100:19
SikaBiresin® RE 451A			Protection of electronic components requiring fire retardant and humidity resistance properties.	UL 94: V0	45 A	2.100	50	1,28	100:10
SikaBiresin® RE 501A**			Sensitive electronic components requiring UL 94 V0. Sensors, printed circuit boards. UL 746B: RTI approved 120°C.	UL 94: V0 UL 746B: RTI 120 °C	55 A	2.200	45	1,29	100:10
SikaBiresin® RE 700	flexible	transparent	Transparent and UV resistant material for LED and lighting encapsulation.		70 A	200	30	1,13	100:100
SikaBiresin® RE 710			Cable connectors and wiring harnesses. Electronic components for the automotive industry.		70 A	750	14	1,19	100:36,3
SikaBiresin® RE 820			Radio transmitters. Applications for electronic components used in an environment where high moisture resistance is desired.		82 A	4.500	40/10	1,10	100:25
SikaBiresin® RE 880			Ideal for automotive applications requiring heat resistance. Sensors. Electronic devices.		88 A	1.500	40	1,41	100:20
SikaBiresin® RE 461			General purposes. Ideal for intricate parts requiring UL 94 V0. Railways fire retardants approved EN 45545.	UL 94: V0 EN 45545	46 D	1.100	10/30/50	1,55	100:16
SikaBiresin® RE 500			All industrial applications requiring a cost-effective product.		50 D	2.600	30	1,66	100:10
SikaBiresin® RE 531	semi-rigid		Low and medium voltage transformer. Converters. UL 746B: RTI approved 150°C. EN 45545	UL 94: V0 UL 746B: RTI 150 °C EN 45545	53 D	1.650	22	1,57	100:14
SikaBiresin® RE 551			Small transformers. Electronic cards. Relays. Electronic filters. Applications requiring a fire resistance.	UL 94: V0	55 D	2.400	30/60	1,55	100:14
SikaBiresin® RE 560			Small transformers. Electronic cards. Relays. Electronic filters. Applications requiring reasonable resistance to humidity.		56 D	1.400	25/30/50	1,33	100:25
SikaBiresin® RE 602			Sensitive potting applications where leakages must be avoided, for example cable connections.		60 D	thixo	7	1,3	127:100
SikaBiresin® RE 800			Applications requiring long manipulation time, for example manual applications. Capacitors. Transformers. Relays.		80 D	1.200	65	1,38	100:28
SikaBiresin® RE 840	rigid		Multipurpose for all kinds of transformers and capacitors.		86 D	800	30	1,58	100:30
SikaBiresin® RE 851			Transformers and capacitors requiring fire retardant properties.		85 D	3.800	10	1,63	100:20
SikaBiresin® RE 885			Transformers, capacitors operating in severe industrial environments (temperature, moisture).		88 D	2.000	13/30	1,53	100:40

\* Tecam Gel Timer, mentioned the pot life of the available variations of resin.

\*\* Availability by country.

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